a digital memory buffer for initially storing the raw image data;

first routines for conveying the initially stored raw image data away from the [frame] digital memory buffer to a second memory [location] to provide space for storing additional, subsequently captured images, wherein the raw image data is stored in uncompressed form in the second memory [location] and wherein the second memory has the capacity to store complete raw image data for multiple raw images;

second routines for conveying said raw image data from the second memory to a processor for processing said raw image data and for storing said processed image data; and

a central processing unit coupled to the imaging device and to the digital memory buffer, for executing according to a predetermined set of priorities the first and second routines;

wherein the first routines are assigned priority over the second routines to thereby facilitate the rapid conveyance of raw image data away from the [frame] digital memory buffer.

17. (Amended) The apparatus of claim 16, wherein the first routines are configured to convey the initially stored raw image data from the [frame] digital memory buffer to a RAM disk.

19. (thrice amended) An apparatus for increasing image capture rate, comprising:

an imaging device for generating raw image data responsive to an image capture request;

a digital memory buffer for storing the raw image data; and

a central processing unit coupled to the imaging device and the digital memory buffer, for transferring the raw image data to a second memory that is external to any processing chip, transferring the raw image data from the second memory to a processor for processing the raw image data and storing the

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processed image data according to a predetermined set of priorities, wherein transferring the raw image data to the second memory has a higher priority than transferring the raw image data to a processor.

20. The method of claim 1 wherein the memory device is a flash memory.

21. The method of claim 1 wherein the memory device is comprised of a first memory device and a second memory device and at least one of either the first memory device or the second memory device is a flash memory.

22. The apparatus of claim 6 wherein the memory device is a flash memory.

23. The apparatus of claim 6 wherein the memory device is comprised of a first memory device and a second memory device and at least one of either the first memory device or the second memory device is a flash memory.

24. (thrice amended) An apparatus for increasing a digital camera capture rate comprising:

a first spooler routine which moves raw image data out of a digital frame buffer and into a second memory that is external to any processor, the first spooler routine having a highest priority;

a processing/compression routine which compresses raw image data from the second memory, the processing/compression routine having a middle priority;

a second spooler routine which moves compressed image data into flash memory, the second spooler routine having a lowest priority; and

a processor for executing the routines according to their priority and according to available processor time.

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25. (twice amended) The apparatus of claim 24 further comprising:

a third spooler routine which moves raw image data out of the second memory,
the third spooler routine having a priority between that of the first spooler
routine and that of the processing/compression routine.

26. (twice amended) The apparatus of claim 24 further comprising:

a third spooler routine which moves compressed image data back to the second
memory, the third spooler routine having a priority between that of the
processing/compression routine and that of the second spooler routine.

27. (thrice amended) A method for increasing a digital camera capture rate comprising
the steps of:

transferring raw image data out of a digital frame buffer and into a second
independent memory;

processing and compressing raw image data from the second independent
memory if either

the transferring raw image data step is complete or

processor time is available during the transferring raw image data step; and

transferring compressed image data from the second independent memory to flash
memory if either

the processing and compressing step is complete or

processor time is available during the processing and compressing step.

28. (amended) An apparatus for increasing image capture rate comprising:

a raw-image input coupled to a raw-image storage, the raw-image input for capturing a
raw image and storing it in the raw image storage;

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a processor that

compresses a raw image only when either

the raw-image input is no longer capturing and storing raw images, or

processor time becomes available; and

pauses the compression of raw images if the raw image input begins to capture new raw images, and resumes compressing raw images when either

the raw-image input is no longer capturing and storing raw images, or

processor time becomes available.

29. The apparatus of claim 28 wherein the raw-image storage comprises a first storage device and a second storage device.

30. The apparatus of claim 29 wherein at least one of either the first storage device or the second storage device is a flash memory.

31. The apparatus of claim 16 wherein the central processing unit and imaging device are both embedded in a single physical apparatus.

32. The apparatus of claim 16 wherein the central processing unit is physically embedded in a personal computer to which the imaging device is communicatively coupled.

33. The apparatus of claim 28 wherein the processor and raw image input are both embedded in a single physical apparatus.

34. The apparatus of claim 28 wherein the processor is physically embedded in a personal computer to which the raw image input is communicatively coupled.

35. (twice amended) An apparatus for increasing image capture rate, comprising:

> an imaging device for generating raw image data responsive to an image capture request;
>
> a digital memory buffer for initially storing the raw image data;
>
> first routines for conveying the initially stored raw image data to a second memory to provide space for storing additional, subsequently captured images in the digital memory buffer, wherein the second memory has the capacity to store complete raw image data for multiple raw images;
>
> second routines for compressing said raw image data, wherein the second routines are not conducted until there are no pending image capture requests and the first routines have conveyed all initially stored raw image data away from the digital memory buffer.

36. (amended) An apparatus for increasing image capture rate, comprising:

> an imaging device for generating raw image data responsive to an image capture request;
>
> a digital memory buffer for receiving and storing the raw image data; and
>
> a central processing unit coupled to the imaging device and the digital memory buffer, for transferring the raw image data to a second memory, processing the raw image data without the assistance of a second processor and storing the processed image data according to a predetermined set of priorities, wherein transferring the raw image data has a higher priority than processing the raw image data.